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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,528	03/20/2001	Pierre Renaud	PAT 113-2	9427
26123	7590	09/07/2004	EXAMINER	
BORDEN LADNER GERVAIS LLP WORLD EXCHANGE PLAZA 100 QUEEN STREET SUITE 1100 OTTAWA, ON K1P 1J9 CANADA			TORRES, JUAN A	
			ART UNIT	PAPER NUMBER
			2631	

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/811,528

Applicant(s)

RENAUD, PIERRE

Examiner

Juan A Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-9 and 11-16 is/are rejected.
- 7) ☒ Claim(s) 4 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09022004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on June 6, 2001 has been considered and made of record by the examiner.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because of the following: FIG. 1 do not include the following reference sign(s) mentioned in the description (50) (52) (54) (66) (56) (58) (60) (62) (64) (68) (138) (144) (146)(140) (70); FIG. 2 presents a Yes output to a non-option statement; FIG. 3 fails to explain two options to the block (114). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because the use of implied phrases. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by James (US 6389547).

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In figure FIG. 10 and in column 7 line 56 to column 8 line 16 James (US 6389547) shows a synchronization method that includes an input clock register (1020), which receives the synchronization time stamp sent by the master clock, and loads the time stamp value into register (1020). James (US 6389547) also includes an output clock register (1030). The values of the input and output clock registers are compared. When there is a difference between the value of the input clock register (1020), and output clock register (1030), it is determined whether the amount of the error is within a predetermined threshold. If so, it is determined the direction of the error, then the output clock register is modified based on the direction of the error.

Claims 3 is rejected under 35 U.S.C. 102(e) as being anticipated by James (US 6389547).

In Figure 11 and in column 8 lines 16-63 James (US 6389547) shows how a direction calculator (1040) compares the value of the input clock register (1020) to the value of the output clock register (1030), the direction calculator (1040) subtracts the value of register (1030) from the value of register (1020), to produce an error value of the output clock register. The absolute value of the error is compared to a predetermined threshold stored in comparator (1055). If the absolute value of the error is less than the predetermined threshold causes the output clock register to adjust the value stored in register (1030) to compensate for the error. When the error value is not below the predetermined threshold, the value of the input clock register (1020) is loaded into the output clock register (1030).

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Claims 6 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by James (US 6389547).

In figures FIG. 10, 11 and in column 8 line 39-43 James (US 6389547) shows that when the direction of the error is fast causes the value of the output clock register to remain constant during a subsequent pulse from oscillator (1035) thus slowing down the output time stamp value by one tick.

Claims 7 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by James (US 6389547).

In figures FIG. 10 11, and in column 8 line 35-39 James (US 6389547) shows that when the direction of the error is slow, the value of the output clock register increases by an additional tick during a subsequent tick from oscillator (1035).

Claims 11, 12, 13, 14, 15, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by James (US 6389547).

In figure FIG. 10 James (US 6389547) shows an input clock register (1020), which receives the synchronization time stamp sent by the master clock, and loads the time stamp value into register (1020); an output clock register (1030); a controller formed by a oscillator (1035), a direction calculator (1040), a fixup register (1060), an absolute value calculator (1050) and a threshold comparator (1055). The values of the input and output clock registers are compared. When there is a difference between the value of the input clock register (1020), and output clock register (1030), it is determined whether the amount of the error is within a predetermined threshold. If so, it is determined the

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direction of the error, then output clock register is changed based on the direction of the error.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over James (US 6389547) as applied to claim 1 above, and further in view of Anderson (US 6356567).

James (US 6389547) teaches claim 1. James (US 6389547) doesn't teach extracting a first timestamp from the received signal and setting the time value of the internal clock to a value derived from the first timestamp. Anderson (US 6456567) in FIG. 3 and in column 11 lines 35-40 teaches that as a general rule, the first PCR initializes the counter in a clock generation, and subsequent PCR values are compared to clock values for fine adjustment and the difference between the PCR and the local clock can be used to speed up or slow down the local clock. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the first time stamp of the input clock register to set the value of the internal clock in the way described by Anderson (US 6356567) to minimize the initial error of the synchronization of a local clock with a master clock in the method described by James (US 6389547).

Allowable Subject Matter

Claims 4 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 10 is allowed.

The following is an examiner's statement of reasons for allowance: claim 10 is allowed because the references cited fail to teach, as applicant has, a method of synchronizing an internal clock in a communications system extracting an original timestamp from a received signal, setting a time value of the internal clock to a value derived from the original timestamp, extracting a subsequent timestamp from the received signal, determining the difference between the subsequent timestamp and the time value and incrementing a fault counter if the magnitude of the difference exceeds a timing threshold, resetting the clock to a value determined from the subsequent timestamp if the fault counter exceeds a fault threshold, and modifying the rate of change of the internal clock if the difference exceeds a rate of change threshold and does not exceed a timing threshold. None of the documents provided as IDS teach the use of a default counter that if the magnitude of the difference exceeds a timing threshold, is incremented, and will reset the internal lock to a value determined from the subsequent timestamp if the fault counter exceeds a fault threshold as the applicant has claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should

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preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A Torres whose telephone number is (571) 222-3119. The examiner can normally be reached on M-F 9:00- 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H Ghayour can be reached on (571) 222-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAT

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9-3-2004


MOHAMMED GHAYOUR
SUPERVISORY PATENT EXAMINER